

# **The Contract Year Phenomenon in the Corner Office: An Analysis of Firm Behavior During CEO Contract Renewals\***

Ping Liu  
University of Illinois at Urbana-Champaign  
[pingliu2@illinois.edu](mailto:pingliu2@illinois.edu)

Yuhai Xuan  
Harvard Business School  
[yxuan@hbs.edu](mailto:yxuan@hbs.edu)

October 6, 2014

## **Abstract**

This paper investigates how executive employment contracts influence corporate financial policies during the final year of the contract term, using a new, hand-collected data set of CEO employment agreements. On the one hand, the impending expiration of fixed-term employment contracts creates incentives for CEOs to engage in strategic window-dressing activities. We find that, compared to normal periods, CEOs manage earnings more aggressively when they are in the process of contract renegotiations. Correspondingly, during CEO contract renewal times, firms are more likely to report earnings that meet or narrowly beat analyst consensus forecasts. Moreover, CEOs also reduce the amount of negative firm news released during their contract negotiation years. On the other hand, we find that merger and acquisition deals announced during the contract renegotiation year yield higher announcement returns than deals announced during other periods, suggesting that the upcoming contract expiration and renewal can also have disciplinary effects on potential value-destroying behaviors of CEOs. In addition, we show that firms whose CEOs are not subject to contract renewal pressure do not experience such corporate policy changes and that CEOs who engage in manipulation during contract renewal obtain better employment terms in their new contracts, in terms of contract length, severance payment, and salary and bonus. Overall, our results indicate that job uncertainty created by expiring employment contracts induces changes in managerial behaviors that have significant impacts on firm financial activities and outcomes.

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\* We thank Heitor Almeida, Lauren Cohen, Ben Esty, Timothy Johnson, and participants at the 2014 Minnesota Corporate Finance Conference for helpful discussions and comments. Xuan gratefully acknowledges financial support from the Division of Research at the Harvard Business School.

## 1. Introduction

*“Let’s talk about Erick Dampier. In his contract year at Golden State, he essentially doubles his rebounds and increases his scoring by 50 percent. Then, after he signs with Dallas, he goes back to the player he was before. What can we conclude from this? The obvious answer is that effort plays a much larger role in athletic performance than we care to admit. When he tries, Dampier is one of the top centers in the league. When he doesn’t try, he’s mediocre. So a big part of talent is effort.”*

– ESPN Bill Simmons’ interview with Malcolm Gladwell

The modern firm can be characterized as a nexus of contracts (Jensen and Meckling, 1976), and in reality, these contracts are typically incomplete. In a principal-agent framework, because it is either impossible or prohibitively costly to fully observe individual actions, the contractual agreements designed to guide appropriate actions from the agents are generally contracted upon imperfect information, thereby creating opportunities for the agents to “game the system” (Prendergast, 1999). The agents’ incentives to engage in strategic behavior to influence the evaluation process can be particularly strong during contract renewal, when their performance is being assessed and their contracts are being renegotiated and subject to termination. In professional sports such as the Major League Baseball (MLB) and the National Basketball Association (NBA), this behavior manifests itself in increased performance by the players in the final year of their current contracts (the “contract year”) in hopes of securing new contracts with lavish terms, and is well documented and commonly referred to as the contract year phenomenon. Like athletes in the MLB and NBA, many CEOs are employed under fixed-term contracts, yet, by contrast, little is known about how CEOs respond to impending contract expirations and in turn influence the behaviors and outcomes of the firms under their control during contract renewal. In this paper, we aim to fill this gap by examining CEO behavior and the resulting corporate financial policy changes in the final year of CEO employment contracts.

Both theoretical and empirical work in the agency literature suggests that while under performance evaluation, agents may engage in “inefficient behavioral responses” that are designed to game the assessment system and influence the assessment outcome to their own benefit, but that are of less value to the organization than some other activity that they could carry out (Prendergast, 1999).<sup>1</sup> Employment contract expiration creates an opportunity for a CEO to renegotiate and improve contract terms in the new agreement but at the same time exposes the CEO to the heightened risk of job termination.<sup>2</sup> Consequently, the CEO, as the agent of his firm, may have particularly strong incentives to engage in strategic behavior during contract renewal times to impress and influence the board of directors and shareholders in the performance evaluation process, in order to get his tenure renewed and contract terms improved in the new employment agreement. Such behavior can take two different forms.

On the one hand, the CEO may be inclined to employ window-dressing strategies, such as managing up earnings or controlling negative firm news release, during the contract renewal period, especially if the board of directors put more weight on the recent performance in their evaluation of the CEO’s overall performance. Indeed, Fudenberg and Tirole (1995) argue that recent performance observations can be viewed by the firm as being more informative than older ones and thus serve as a more important factor in the performance evaluation of managers. This “information decay” forms a key building block for a theory of earnings management based on managers’ concern about keeping their positions (Fudenberg and Tirole, 1995). The bias of favoring recent information in review processes is also related to the cognitive heuristic of representativeness (Tversky and Kahneman, 1974), as the most recent performance of the CEO can be the most salient in the evaluation and thus get emphasized and extrapolated (Shleifer, 2000). Moreover, even if corporate boards and investors are rational in the sense that they anticipate the short-term window-dressing behavior by the CEO during contract renegotiation,

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<sup>1</sup> See Prendergast (1999) for a comprehensive review of the literature on agents and incentives.

<sup>2</sup> Xu (2011) shows that CEO dismissal rates are the highest close to or at contract expiration.

the opportunistic behavior could still exist as an equilibrium outcome (Stein, 1989). Stein (1989) models myopic corporate behavior as the Nash equilibrium outcome of a noncooperative game: in a situation analogous to the prisoner's dilemma, managers faced with short-term pressure engage in myopic behavior to boost earnings up even though the market correctly conjectures myopia and the resulting earnings inflation and takes them into account in making its predictions. Overall, the CEO has strong incentives during contract renewal to employ window-dressing strategies to manipulate performance signals, such as earnings management and news release timing, if the CEO believes that superior recent performance can increase his bargaining power in the contract renegotiation process.

On the other hand, the desire to show good performance and the job uncertainty created by the impending contract expiration can also have disciplinary effects on potential value-destroying behaviors of the CEO. Existing research shows that corporate boards use possible turnovers as a threatening device to discipline self-serving managers (Weisbach, 1988; Morck, Shleifer and Vishny, 1989) and that the probability of CEO dismissal is heightened at contract expiration (Xu, 2011). Therefore, the CEO whose contract is up for renewal may be particularly cautious in choosing projects during the contract renegotiation period so as to avoid making decisions that detract from his performance or are perceived as salient mistakes by the market. As a result, certain aspects of corporate performance and outcomes can be superior during CEO contract renewal times as compared to other periods.

Using a new, hand-collected sample of fixed-term employment agreements for CEOs of the S&P 500 firms from 2001 to 2010, we find strong evidence of the contract year phenomenon exhibited by firms whose CEOs are in the final year of their current employment contracts. Our analysis shows that, compared to normal periods, CEOs manipulate earnings more aggressively when they are in the process of contract renegotiations. In the one-year period leading up to the contract ending, the average quarterly abnormal accruals (scaled by total assets) of a sample firm are 0.014 higher than those of the same firm during the one-year period before or after its CEO's

contract year. This difference is significant not only statistically but also economically, representing an almost three-fold increase in earnings management intensity in the contract year over the sample average abnormal accruals of 0.005. Correspondingly, during CEO contract renewal times, firms are more likely to report earnings that meet or narrowly beat analyst consensus forecasts. For example, the likelihood for firms to just beat (by one cent) analyst consensus earnings estimates is 7.8 percentage points higher in the four quarters during the contract year than in the four quarters before or after the contract year, which is a substantial increase given that the sample average propensity to just beat consensus estimates is 9.0%. In addition to manipulating earnings, CEOs also strategically control the amount of negative firm news disseminated during their contract year. We show that the average number of negative news pieces disclosed by a sample firm through SEC filings and press releases decreases sharply in its CEO's contract year. For example, the amount of downsizing and layoff news drops by more than 40% compared to non-contract years. Overall, these results indicate that CEOs faced with the pressure from contract renewal actively engage in gaming strategies to manipulate both the quantitative (earnings) and the qualitative (news) signals that may benefit their performance evaluation.

At the same time, we also find support for the disciplinary effects of the impending contract renewal in the contract year. Our analysis focuses on CEOs' acquisition decisions. Mergers and acquisitions are important corporate events that generally have substantial impacts on shareholder wealth, yet these transactions are often conducted for CEOs' private benefit at the tremendous cost of shareholder value (e.g., Morck, Shleifer and Vishny, 1990). As a result, CEOs' performance evaluations typically place an emphasis on acquisition performance, and CEOs who conduct value-destroying deals are more likely to be dismissed (Lehn and Zhao, 2006). Moreover, the market's reaction to firms' acquisition decisions is highly visible and immediately available upon deal announcement, providing a strong and timely signal on performance. Therefore, CEOs may be particularly cautious in their acquisition decisions in the

contract year to ensure performance and avoid value destruction. Indeed, we find that acquisitions announced during a CEO's contract year receive significantly better reactions from the market compared to acquisitions conducted by the same CEO in the year before or after his contract year. Everything else equal, the average three-day cumulative abnormal return (CAR) for acquisitions announced in the contract year is 1.3 percentage points higher, a difference that is significant both statistically and economically.

Figure 1 summarizes and depicts our findings on the four aspects of firm behavior that we examine—earnings management, the propensity to just beat consensus earnings estimates, negative news release, and acquirer announcement return—contrasting the contract year against the surrounding years. Each date on a graph represents a quarter (year) relative to the contract ending quarter (year), which is denoted by 0. The contract year clearly stands out in its high earnings management intensity (Figure 1A), high likelihood to just beat earnings estimates (Figure 1B), high acquirer CARs upon acquisition announcement (Figure 1D), and low number of negative news releases (Figure 1C). Together, these graphs illustrate a clear pattern of distinctly different firm behavior in a CEO's contract year as compared to in non-contract renewal years.

[Insert Figure 1 here]

Our empirical methodology to identify the CEO contract year phenomenon relies on a comparison of firm behavior during a CEO's contract ending year and during the surrounding years under the same CEO's control. The identification is relatively clean because contract ending years are predetermined at the time when the contracts are signed, often several years prior. Moreover, our tests in the full specification include firm-level fixed effects, which allow us to examine changes in financial policies within the same firm under the same CEO during contract renewal times while controlling for a full range of unobservable firm characteristics. In addition, we also study firm behavior under CEOs who are not subject to contract renewal pressure, including CEOs who are scheduled or expected to leave their posts upon contract

expiration as well as a sample of CEOs who are matched to the main sample by industry, tenure, and year. CEOs who know that they will step down after their current employment contracts expire should not have as strong an incentive to engage in strategic behaviors during the contract ending year. Indeed, we observe no behavioral changes for such CEOs in the final year of their contracts: their firms do not intensify earnings manipulation and have similar propensity to meet or just beat analyst earnings estimates and similar acquisition performance as in non-contract ending years. Similarly, there is no significant change in any aspect of firm behavior around “pseudo” contract years for the sample of matching CEOs. Furthermore, a difference-in-differences examination of corporate behavior changes around the (actual and pseudo) contract ending year indicates that CEOs whose contracts are under review for renewal change their behavior significantly in the contract year as compared to CEOs who are bound to leave office upon contract expiration and to matching CEOs in the pseudo contract year. These analyses further confirm that it is the upcoming contract renewal and the associated incentives to influence the evaluation process and renewal outcome, rather than the contract ending per se or other industry- or tenure-related factors, that drive CEOs’ behavior changes in the contract year.

We complete our analysis by assessing the benefits accrued to CEOs from their manipulative behaviors during contract renewal. Using the incremental earnings management intensity in the contract year over the surrounding years as a proxy for the extent of CEOs’ opportunistic behavior, we find that CEOs who more actively engage in manipulation in the final year of their contracts obtain greater contract lengths, more generous severance packages, and higher salaries and bonuses in their new employment agreements. CEOs’ behavior change in the contract year is thus rationalized: their strategic behaviors during contract renewal are associated with overall more favorable employment terms in the new contracts.

Taken together, our results indicate that job uncertainty created by expiring employment contracts induces incentives to game the evaluation procedure and influence the evaluation outcome, resulting in changes in managerial behaviors that have significant impacts on firm

financial activities and outcomes. These findings complement the classic literature on agency, incentives, and contracts. In particular, a set of theoretical work focuses on inefficient behavioral responses that arise in performance evaluation and contracting situations, such as multi-tasking (e.g., Holmstrom and Milgrom, 1991) and rent-seeking (e.g., Milgrom, 1988; Tirole, 1992). These theories emphasize that incentive schemes and contracts often have unintended consequences caused by agents changing their activities to their benefit in attempts to influence the evaluation process and outcome. Focusing on corporate earnings, Stein (1989) and Fudenberg and Tirole (1995) model earnings management as an equilibrium response from managers who are concerned about keeping their position to manipulate signals used by the market and the firm in forecasts and evaluations. Despite the multiplicity of theoretical models, relevant empirical evidence is relatively limited due to data availability constraints and problems of identification.<sup>3</sup> This paper presents a study of agents' strategic behavioral responses in a relatively clean empirical setting and illustrates clear patterns of CEOs' behavioral changes during their employment contract renewal that significantly impact firm financial policies. The paper also contributes to the small but burgeoning literature on CEO employment contracts (Gillan, Hartzell, and Parrino, 2009; Xu, 2011). By documenting the countervailing effects of job uncertainty created by the expiration of fixed-term contracts, this paper enriches the understanding of CEOs' varying behavior and incentives at various points in the contract cycle as well as during contract renegotiation and provides useful insights for designing optimal managerial contracts.

The remainder of this paper is organized as follows. Section 2 discusses the data and the construction of the variables. Section 3 presents the empirical analysis of the CEO contract year phenomenon, focusing on firm earnings management activities, propensity to meet or just beat

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<sup>3</sup> For example, Healy (1985) shows that managers strategically report earnings when their compensation is a nonlinear function of earnings, i.e., they underreport when actual earnings are in a region where it is unlikely that they earn additional reward (e.g., when earnings are above the reward ceiling specified in the compensation scheme or far below the floor). Oyer (1998) studies how salespeople's contracts based on performance over the fiscal year induce these agents to manipulate prices and influence the timing of customer purchases.

analyst earnings estimates, release of negative news, and acquisition performance, as well as examining the behavior of CEOs who are not subject to contract renewal pressure and the benefits accrued to manipulative CEOs in their new employment contracts. Section 4 concludes.

## **2. Data and variables**

This section describes the sample construction process and discusses the data sources as well as the variables used in the empirical analysis. The summary statistics for the variables are provided in Table 1.

[Insert Table 1 here]

### *2.1. CEO employment contracts*

We start building our sample by hand-collecting employment contracts for the CEOs of all firms included in the Standard & Poor's (S&P) 500 index from 2001 to 2010. Our sample coverage reflects a balance between sample representativeness and a manageable workload of data collection. Information on CEO employment agreements is publicly available through corporate filings with the U.S. Securities and Exchange Commission (SEC). Regulation S-K specifies that CEO employment agreements are considered material contracts, which require public disclosure in Form 8-K (filed under Item 1.01, Entry into a Material Definitive Agreement) and Form 10-K or 10-Q (filed as Exhibit 10, Material Contracts).<sup>4</sup> Therefore, we manually search through all relevant SEC filings to identify and retrieve CEO employment contracts.<sup>5</sup> To be retained in our sample, a CEO's employment agreement must be fixed-term,

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<sup>4</sup> See <http://www.sec.gov/divisions/corpfin/form8kfaq.htm> and <http://www.sec.gov/investor/pubs/edgarguide.htm>.

<sup>5</sup> The original contract in its entirety is normally included in one of the filings. Other filings may provide a brief description of the employment agreement and then reference the filing that contains the detailed information. For example, in Exhibit 10.ii of the 2002 Form 10-K filed on March 21, 2003, MEMC Electronic Materials Inc. indicates that the employment agreement for its CEO, Nabeel Gareeb, was first filed in Exhibit 10.ii of the firm's

with an exact ending date. Furthermore, to compare firm policies during the CEO's contract year with those in the years before and after the contract renewal, we require that the contract length be at least two years, that the CEO remain in office for at least two years after the contract is renewed, and that firm financial data be non-missing for the years surrounding the contract renewal (one year before and one year after). Our final sample of CEO contracts consists of 159 employment agreements that cover 130 firms and 138 CEOs, with an average contract length of 3.2 years.

## 2.2. *Earnings management*

We use Compustat quarterly data to compute the measure for earnings management. Following Dechow, Sloan, and Sweeney (1995), we estimate abnormal accruals as a proxy for the intensity of earnings management activities using the modified Jones model. The basic idea of the model is to purge non-discretionary accruals, which can occur in the normal course of business even in the absence of any earnings manipulation, from total accruals to arrive at an estimate for discretionary accruals, which reflect management choice and earnings quality. Specifically, for each quarter, we estimate the Jones (1991) accruals regressions for all firms in each two-digit Standard Industrial Classification (SIC) industry, in which the dependent variable is total accruals, defined as the difference between net income before extraordinary items and net cash flow from operating activities scaled by total assets, and the independent variables include the change in net sales, gross property, plant and equipment, and a constant term, all scaled by total assets.<sup>6</sup> Estimates from these regressions are then used to generate fitted values for each

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Form 10-Q for the quarter ending on March 31, 2002. We then locate the Form 10-Q filed on August 14, 2002 for the quarter ending on March 31, 2002 to retrieve the CEO employment agreement.

<sup>6</sup> For each regression, we require that at least six firms with available data exist in the industry-quarter cluster.

firm in each quarter, which approximate the firm's non-discretionary accruals (scaled by assets).<sup>7</sup> The measure of abnormal accruals (scaled by assets) is calculated as the difference between total accruals and non-discretionary accruals.

### 2.3. *Analyst consensus earnings forecasts*

We use the I/B/E/S database to construct the variables for estimating a firm's propensity to meet or narrowly beat analyst consensus earnings estimates. From I/B/E/S, we obtain reported quarterly earnings per share (EPS) and consensus EPS forecast numbers. For each quarter, we compare a firm's actual EPS with the latest analyst consensus (median) EPS before the end of the quarter and construct two dummy variables indicating whether the firm's earnings meet or narrowly beat market expectations. The first dummy variable is equal to one if the quarterly EPS number either exactly equals the analyst consensus forecast or exceeds the consensus by just one cent and zero otherwise. The second dummy variable is equal to one if the quarterly EPS number exceeds the analyst consensus forecast by just one cent and zero otherwise.

### 2.4. *Firm news releases*

We use two data sources for analyzing firm new releases. The first is the Key Development Database provided by Capital IQ. This database collects all the key events of public firms from various third party news sources, corporate press releases, as well as corporate filings to the SEC. For each piece of news, the database provides the announcement date and time, the headline, and the content of the news. More importantly, it reports the news category into which Capital IQ classifies each news article. The major categories with most news stories include "Client Announcements", "Product-related Announcements", "Strategic Alliances",

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<sup>7</sup> The modified Jones model (Dechow, Sloan, and Sweeney, 1995) adjusts changes in net sales by changes in accounts receivable to account for the discretion made on the realization of revenues from sales on credit and uses the adjusted change in net sales in the prediction stage.

“Discontinued operations/Downsizings”, etc. To examine the release of negative firm news, we count for each firm the number of news articles classified as “Discontinued operations/Downsizings”, “Corporate Guidance – Lowered”, or “Dividend Decrease” in the one-year period leading to the contract ending date as well as in the one-year periods before and after the contract year. Since about 80% of the negative news comes from the “Discontinued operations/Downsizings” category, we also examine the number of downsizing and layoff news articles separately.

Our second news data source is compiled from the 8-K filings of our sample firms. Major downsizings and layoffs constitute material events that require the filing of Form 8-K. We first parse all 8-K filings of our sample firms and search for the keywords “workforce reduction”, “layoff”, “downsize”, “discontinued operation”, “shutdown”, “disposal activities”, and their variations. Next, we manually read the content of each Form 8-K that contains one or more of the keywords and retain only those filings that include news related to major downsizing or layoff events. For each firm, we then count the number of layoff or downsizing news releases filed through 8-K filings during the CEO contract year and its surrounding years.

## 2.5. *Acquisitions*

We obtain acquisition data for the sample firms from the Securities Data Company (SDC) U.S. Mergers and Acquisitions Database, including the acquisition announcement date, the target type, the value of the transaction, and the percentage of cash and stock used in the financing. We manually search corporate filings and news reports to fill in any missing values, when possible. We require that the acquisition be completed and that the acquirer own less than 50% of target shares at the announcement date and acquire 100% of target shares after the transaction. To study the market’s reaction to the acquisition announcement, we calculate for each transaction the three-day cumulative abnormal return (CAR) surrounding the deal announcement date. Daily abnormal returns are calculated as differences between the actual

daily returns and the predicted values using a market model estimated in the period from days -205 to -6 relative to the announcement date (Brown and Warner, 1985). Daily abnormal returns are then cumulated over the three-day event window to arrive at the cumulative abnormal returns. Our final acquisition sample consists of 264 transactions conducted by the sample firms in a CEO contract year and its surrounding years.

### 3. Empirical results

Our empirical strategy to analyze how CEOs act differently during contract renewal times relies on a comparison of firm behavior during the contract year versus during the surrounding years. Specifically, we estimate the following empirical model:

$$\text{Firm behavior} = f(\text{Contract year}, \text{Firm controls}, \text{Year fixed effects}, \text{Firm fixed effects}). \quad (1)$$

In Eq. (1), the dependent variable is an aspect of firm behavior that we examine: earnings management, the propensity to meet or narrowly beat consensus earnings estimates, negative news release, or acquirer announcement return. The key independent variable of interest is *Contract year*, a dummy variable that equals one if the observation occurs in the contract ending year and zero if the observation occurs in the year before or the year after the contract ending year. Other independent variables include firm controls such as firm size,  $Q$ , leverage, and operating performance as well as year and firm fixed effects.<sup>8</sup> The identification is relatively clean because contract ending years are predetermined at the time when the contracts are signed, often several years apart. Moreover, including firm fixed effects in our model allows us to compare corporate policies of the same firm under the same CEO during contract renewal times versus during normal times while controlling for a full range of unobservable firm characteristics.

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<sup>8</sup> Firm size is measured by log total assets.  $Q$  is calculated as total assets plus market equity minus book equity and deferred taxes all over total assets. Leverage is calculated as the sum of debt in current liabilities and long-term debt, divided by total assets. Operating performance is defined as operating income before depreciation divided by total assets.

### 3.1. *Earnings management*

We first examine earnings management activities around CEO contract renewal. Corporate earnings are a highly visible signal commonly used by the market and the firm in forecasts and evaluations and are thus prone to strategic manipulation by management, especially when performance assessment and contract renegotiation are under way (e.g., Healy 1985; Stein, 1989; Fudenberg and Tirole, 1995; Healy and Wahlen, 1999). Table 2 presents the ordinary least squares (OLS) regression results contrasting earnings management activities in the CEO contract year versus in the surrounding years.

[Insert Table 2 here]

For each sample firm, we include in the regressions 12 quarterly observations, the four quarters leading up to the contract ending and the eight surrounding quarters (four before and four after). The dependent variable is the quarterly abnormal accruals (scaled by assets) as a proxy for earnings management intensity, estimated from quarterly income and financial data using the modified Jones model (Jones, 1991; Dechow, Sloan, and Sweeney, 1995). The key independent variable of interest, *Contract year*, is a dummy variable that takes the value one for the four quarters leading up to the contract ending and zero for the four quarters before and four quarters after the contract year. We run four regression specifications. The first includes the *Contract year* dummy only on the right hand side. The second adds firm controls, and the third further adds year fixed effects. The fourth is the full specification with firm fixed effects added.

Across all specifications, we see that the coefficient on the *Contract year* dummy is significantly positive. Everything else equal, the average quarterly abnormal accruals of a sample firm are 0.014 higher in the CEO contract year than those of the same firm during the one-year period before or after. This difference is highly significant both statistically and economically, representing a nearly three-fold increase in earnings management intensity in the contract year over the sample average abnormal accruals of 0.005. The sharp increase in

earnings management activities during the contract year is consistent with the hypothesis that the heightened pressure of job uncertainty associated with contract renewal induces CEOs to engage in strategic manipulation in the hopes of increasing their bargaining power in the negotiation process.

### *3.2. Propensity to meet or narrowly beat analyst consensus earnings estimates*

We next examine how a firm's likelihood to meet or marginally beat analyst consensus earnings estimates changes in the CEO contract year. Matching or beating earnings consensus number is one of the most commonly used yardstick by investors and directors for assessing corporate performance. Firms that miss consensus forecasts are penalized by the market while firms that meet and especially those that beat the consensus estimates experience price run-ups after earnings announcements (e.g., Richardson, Teoh, and Wysocki, 2004; Bhojraj, Hribar, Picconi, and McInnis, 2009). Therefore, managers use analyst consensus earnings forecasts as a benchmark in earnings management, and as a result, a disproportionately higher number of firms meet or narrowly beat (by one cent) consensus estimates than would be expected by chance alone (e.g., DeGeorge, Patel, and Zeckhauser, 1999). Indeed, most managers acknowledge that they are willing to manipulate earnings so that their reported quarterly earnings number does not fall short of the current quarter consensus estimate according to a survey conducted by Graham, Harvey, and Rajgopal (2005). A firm's propensity to meet, and especially to just beat, the analyst consensus earnings forecast is thus a useful proxy for earnings management activities encompassing manipulation through accruals as well as real activities (e.g., Roychowdhury, 2006; Bhojraj, Hribar, Picconi, and McInnis, 2009).

In Table 3, we present the results of our analysis of this propensity in the contract year versus during the surrounding years using Probit regressions (with marginal effects reported). For each sample firm, we include in the regressions 12 quarterly observations, four quarters before, four quarters during, and four quarters after the contract year. In Columns 1 through 4,

the dependent variable is a dummy variable that equals one if the quarterly EPS number either equals the analyst consensus forecast or exceeds the consensus by just one cent and zero otherwise. In Columns 5 through 8, we examine separately the likelihood to narrowly beat consensus forecast using a dependent variable that is a dummy variable equal to one if the quarterly EPS number exceeds the analyst consensus forecast by just one cent and zero otherwise. As before, the key independent variable, *Contract year*, is a dummy variable that takes the value one for the four quarters leading up to the contract ending and zero for the four quarters before and four quarters after the contract year.

[Insert Table 3 here]

The consistently positive and significant estimates on *Contract year* across all columns in Table 3 indicate that firms are more likely to report earnings that meet or narrowly beat analyst consensus forecasts when the CEO is going through the employment contract renewal. Using the estimates from Column 4 with firm and year fixed effects, for example, the propensity for a firm to meet or just beat the consensus earnings forecast is 9.3 percentage points higher in the four quarters during the contract year than in the four quarters before or after the contract year. This is a substantial increase in likelihood given that the sample average propensity to meet or just beat consensus estimates is 19.4%. Similarly, estimates from Column 8 show that the likelihood for a firm to marginally beat the consensus forecast by just one cent is 7.8 percentage points higher in the contract year, representing an 87% jump over the sample average propensity to just beat consensus forecasts (9.0%). Using the likelihood to meet or narrowly beat analyst earnings consensus as an all-encompassing measure for earnings manipulation activities, these results corroborate our findings on accruals management and suggest that CEOs strategically manipulate earnings during their contract renewal times to deliver window-dressed earnings that appeal to the shareholders and directors.

### 3.3. *Release of negative firm news*

In addition to manipulating earnings, CEOs can also strategically control the amount of negative firm news disseminated during their contract year. Existing studies show that corporate news releases, especially negative ones, affect asset prices (e.g., Tetlock, 2007). Accordingly, managers, realizing the potential impact of news, often strategically control the timing of negative news or delay the release of bad news in order to manipulate investor perceptions and influence market responses (e.g., Dellavigna and Pollet, 2009; Kothari, Shu, and Wysocki, 2009; Ahern and Sosyura, 2014). In this subsection, we therefore examine the pattern of negative firm news releases around the CEO contract year.

Table 4 presents the OLS regression results from this investigation. For each sample firm, we include in the regressions three annual observations for the contract year and its neighboring years. The dependent variable in Columns 1 through 4 is the total number of negative news articles reported in the Capital IQ database. In Columns 5 through 8, our dependent variable focuses on the number of downsizing and layoff news articles separately since this is the major news category that contains approximately 80% of the negative news compiled by Capital IQ. The dependent variable in Columns 9 to 12 is the number of layoff or downsizing news releases filed through 8-K filings. These are major downsizings and layoffs that constitute material events that require the filing of Form 8-K. The key independent variable, *Contract year*, is a dummy variable that equals one for the one-year period leading to the contract ending date and zero for the one-year period before or after.

[Insert Table 4 here]

The results are consistent across different specifications and different definitions of negative news. The negative and significant coefficients on *Contract year* indicate that the average number of negative news pieces disclosed by a sample firm through SEC filings and press releases decreases sharply in its CEO's contract year. The economic magnitude is also significant. Relative to sample means, the amount of all negative news released, the amount of downsizing and layoff news released, and the amount of major downsizing and layoff news

released drop by 35%, 41%, and 74%, respectively, during the contract year. These results suggest that in addition to manipulating quantitative signals through window-dressed earnings, CEOs faced with the pressure from contract renewal also actively control the more qualitative signals (such as news) that may impact the evaluation and renegotiation process.

#### *3.4. Acquisition performance*

So far we have shown that the expiration of fixed-term employment contracts creates incentives for CEOs to engage in strategic behavior in the final year of the contracts to “game” the evaluation and renewal process. However, the desire to show good performance in the contract renewal period and the job uncertainty created by the impending contract expiration can also have disciplinary effects on potential value-destroying behaviors of CEOs. At contract expiration, the probability of CEO dismissal increases, and the threat of possible turnovers can restrain CEOs’ self-serving behaviors that may not be in the best interest of the shareholders (e.g., Weisbach, 1988; Morck, Shleifer and Vishny, 1989; Xu, 2011). As a result, CEOs may be particularly cautious during the contract renegotiation period and refrain from making decisions that detract from performance or are perceived as salient mistakes by the market.

In this subsection, we focus on CEOs’ acquisition decisions. Mergers and acquisitions are important corporate events that generally have large impacts on shareholder wealth yet are often conducted for CEOs’ private benefits (e.g., Morck, Shleifer and Vishny, 1990). Acquisition performance is an important aspect of CEOs’ performance evaluation, and CEOs who conduct value-destroying transactions are more likely to be dismissed (Lehn and Zhao, 2006). Moreover, the market’s reaction to firms’ acquisition decisions is highly visible and immediately observable upon deal announcement, providing a strong and timely signal on performance. Therefore, CEOs may exercise particular caution in their acquisition decisions during contract renewal to ensure performance and avoid value destruction.

We examine the acquisition announcement returns of all acquisitions conducted by sample firms around CEO contract renewals in Table 5 using OLS regressions. The dependent variable is the three-day cumulative abnormal returns (CAR[-1, +1]) for the acquirer. The key independent variable, *Contract year*, is a dummy variable that equals one if the acquisition takes place in the one-year period leading up to the contract ending date and zero if the acquisition takes place in the one-year period before or after. In addition to acquirer characteristics, we also control for deal characteristics including the relative size of the transaction, whether the acquisition is financed 100% with equity, whether the acquirer and the target are in related industries, and whether the target is a public firm.<sup>9</sup>

[Insert Table 5 here]

The results in Table 5 show that the market reacts more favorably to acquisitions announced in the CEO contract year than to those announced in surrounding years. The coefficient on *Contract year* is positive and highly significant across all specifications. Based on the estimates from Column 4 with the addition of both year and firm fixed effects, for example, the average three-day CAR for acquisitions announced in the contract year is 1.3 percentage points higher, a difference that is significant not only statistically but also economically. This pattern of acquisition announcement returns around CEO contract renewal times is consistent with the disciplinary effect of the impending contract expiration on CEO behavior during the contract year.

### 3.5. *Behavior of CEOs who are not subject to contract renewal pressure*

To confirm that CEOs' behavioral changes in the contract year are induced by pressures and uncertainties associated with the evaluations and renegotiations involved in the contract renewal process, we also examine firm behavior under CEOs who are not subject to contract

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<sup>9</sup> Relative transaction value is defined as the transaction value divided by acquirer market capitalization. A deal is classified as related if the acquirer and the target have the same two-digit SIC code.

renewal pressure. Specifically, we study the behavior of CEOs who are bound to leave office upon contract expiration as well as the behavior of a sample of CEOs who are matched to our main sample by industry, tenure, and year around “pseudo” contract years.

We first focus on CEOs who are scheduled or expected to leave their posts upon contract expiration. If it is the impending contract renewal that brings about the changes in CEO behavior, the CEOs who know that they will step down after the expiration of their current employment contracts should not have as strong an incentive to engage in strategic or manipulative activities during the contract ending year.

From the data we collected, we thus construct a sample of CEOs who are bound to leave office upon contract expiration. This sample consists of 24 CEOs who work under fixed-term employment contracts of at least two years’ length, are aware before or in the contract year that their contracts will not be renewed upon expiration, and leave office after their contracts expire. In Table 6, we compare the changes in firm behavior around contract expiration for this group of “departing CEOs” against our main sample of CEOs using the difference-in-differences analysis.

[Insert Table 6 here]

Panels A, B, and C of Table 6 focus on earnings management (abnormal accruals), the propensity to meet or narrowly beat consensus EPS forecasts, and acquirer announcement returns, respectively.<sup>10</sup> For departing CEOs, *Non-contract year* is the year before the contract year. For CEOs in our main sample, *Non-contract year* denotes the year before and the year after the contract year. The first column in each panel shows that firms with departing CEOs and firms with CEOs renewing their contracts are similar in their earnings management activities, likelihood to meet or just beat EPS consensus, and acquisition performance. None of the differences between the two groups in the first column is statistically significant. In the contract year, however, the two groups of CEOs behave very differently. While firms under CEOs

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<sup>10</sup> Negative news release is not included in the difference-in-differences analysis because all firms in the departing CEO sample have zero negative news release before or during the contract year.

seeking contract renewal increase earnings management, become more likely to meet or narrowly beat earnings consensus, and have better acquisition performance in the contract year, we observe no significant changes in any of these aspects of firm behavior in the final year of their contracts as compared to non-contract years for the departing CEOs. Furthermore, the difference-in-differences estimates compare corporate behavior changes around contract expiration for the two groups and show that CEOs whose contracts are under review for renewal change their behavior during the contract year in a way that is significantly different from CEOs who are bound to leave office upon contract expiration.

We also examine the behavior of a sample of CEOs who are matched to the main sample by industry, tenure, and year around pseudo contract years. The matching CEOs and the pseudo contract years are chosen in the following manner. For each CEO in our main sample, we calculate the length of his CEO tenure at his firm as of the actual contract year and then identify all CEOs in other S&P 500 firms in the same 3-digit SIC industry as potential matches. For each potential match, the associated pseudo contract year is the year in which the length of CEO tenure for the potential match equals the actual tenure length of the main sample CEO. To be further considered as a matching candidate, we require that the pseudo contract year be indeed pseudo, i.e., it is not an actual contract ending year for the potential match, to make sure that the matching CEO is not subject to contract renewal pressure in the pseudo contract year. We also require that the potential match preside over his firm as CEO in the three years around the pseudo contract year. From the qualified matching candidates, we then choose the matching CEO as the potential match whose pseudo contract year is the closest in time to the actual contract year for the main sample CEO. In essence, matched by industry, tenure, and year, the matching sample provides a set of pseudo contract years for CEOs with the same length of tenure in the same industry as our main sample CEOs.

Table 7 reports estimates from the difference-in-differences analysis that compares firm policy changes for the sample of matching CEOs around the pseudo contract year and CEOs in

our main sample around the actual contract year. *Non-contract year* denotes the year before and the year after the (actual or pseudo) contract year. The results in Table 7 show that, for the sample of matching CEOs, there is no significant change in any firm behavior around pseudo contract years, in terms of earnings manipulation (Panel A), likelihood to meet or just beat earnings forecasts (Panel B), negative news release (Panel C), or acquisition performance (Panel D). The difference-in-differences estimates are statistically significant in all four panels, indicating that the changes in firm behavior around actual CEO contract ending years are significantly different from any changes (if at all) around pseudo contract years.

[Insert Table 7 here]

Overall, the results from these analyses support that it is the impending contract renewal and the associated incentives to influence the evaluation and renegotiation process, rather than the contract ending per se or other industry- or tenure-related factors, that drive the changes in CEO behavior during the contract year.

### 3.6. *Benefits accrued to CEOs from manipulation during contract renewal*

In this subsection, we examine whether CEOs' strategic behaviors in the contract year strengthen their bargaining position in the contract renewal process and bring them any benefits as reflected in their new contracts. To assess this, we use the incremental earnings management intensity in the contract year as a proxy for the extent of CEOs' manipulative behavior and explore its link to improvements in the contract terms of their new employment agreements after renewal. Table 8 presents the results from this investigation.

[Insert Table 8 here]

We examine changes in three contract terms: contract length, severance, and salary and bonus. In Columns 1 through 3, we run Probit regressions (with marginal effects reported) in which the dependent variable is a dummy variable that equals one if the contract length is improved in the new employment agreement and zero otherwise. The contract length is

considered improved if the new contract length is greater than the old one or if the new employment contract switches from a fixed-term contract to a contract with indefinite term. In Columns 4 through 6, we run Probit regressions (with marginal effects reported) in which the dependent variable is a dummy variable that equals one if the CEO's severance package improves in the new contract and zero otherwise. Severance is considered improved if the amount of severance pay specified in the new contract is greater than that in the old contract or if the circumstances under which the CEO can receive severance pay upon leaving post become broader. In Columns 7 through 9, we run OLS regressions in which the dependent variable is the difference between the sum of salary and bonus specified in the new contract versus the sum of salary and bonus the CEO earns in the last year of the current contract, scaled by the sum of salary and bonus in the last year of the current contract. The key independent variable, *Incremental earnings management intensity in the contract year*, is defined as the difference between the average abnormal accruals in the contract year and the non-contract years, scaled by the average abnormal accruals in the non-contract years, and serves as a proxy for the extent of manipulative activities by the CEO.

The estimates in Table 8 indicate that the extent of the CEO's opportunistic behavior is positively and significantly associated with the likelihood that the new employment agreement has greater contract length and more generous severance benefits as well as the change in salary and bonus. This relationship is robust across all specifications. CEOs who more actively engage in window-dressing activities in the contract year benefit from their "gaming" behaviors: they tend to end up with overall more favorable employment terms in their new contracts.

#### **4. Conclusion**

The aim of this paper has been to investigate how CEO employment contracts influence CEO behavior and firm financial policies during the final year of the contract term. We

document the contract year phenomenon in the corner officer: CEOs faced with the pressure and uncertainty associated with the impending contract expiration engage in strategic behaviors in the contract ending year in order to increase their bargaining power in the evaluation and renegotiation process and influence the renewal outcome. We find that CEOs employ window-dressing strategies in the contract year by managing up earnings and controlling the release of negative firm news. Firms have higher abnormal accruals, are more likely to meet or just beat analyst earnings consensus estimates, and release less negative news in their CEOs' contract year compared to during normal periods. At the same time, we find that the upcoming contract renewal and the associated evaluation and possibility of termination have disciplinary effects on CEOs' potential value-destroying behaviors. Acquisitions conducted in the CEO contract year have significantly higher abnormal returns upon announcement than those conducted during normal times. In addition, we show that firms under CEOs who are not subject to contract renewal pressure do not exhibit the same pattern of changes in behavior and that CEOs who engage in manipulation during contract renewal obtain better employment terms in their new contracts, in terms of contract length, severance benefits, and salary and bonus.

Overall, our results suggest that job uncertainty created by expiring employment contracts induces changes in managerial behaviors that have significant impacts on firm financial activities and outcomes. The countervailing forces associated with contract renewal uncovered in this paper, namely the gaming incentives versus the disciplinary effects, enrich our understanding of CEO incentives and behaviors and provide useful insights towards the design of optimal managerial contracts.

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## Figure 1

Firm behavior around the CEO contract year.

This figure depicts four aspects of firm behavior—earnings management (Figure 1A), the propensity to just beat consensus earnings estimates (Figure 1B), negative news release (Figure 1C), and acquirer announcement returns (Figure 1D)—around the CEO contract year. Each date on a graph represents a quarter (year) relative to the contract ending quarter (year), which is denoted by 0.

Figure 1A: Earnings management

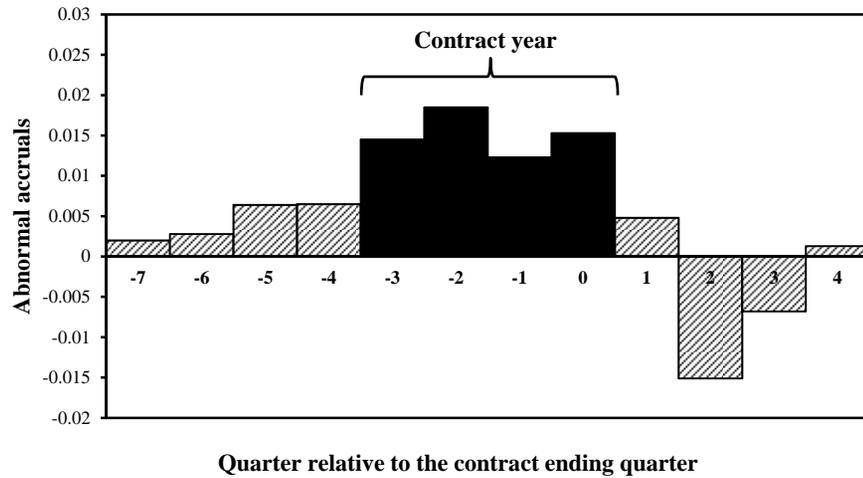


Figure 1B: Propensity to just beat consensus earnings estimates

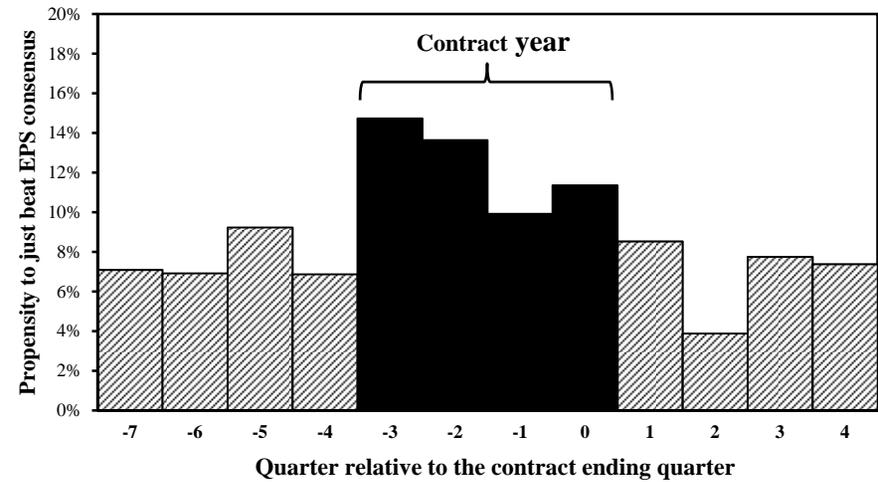


Figure 1C: Negative news release

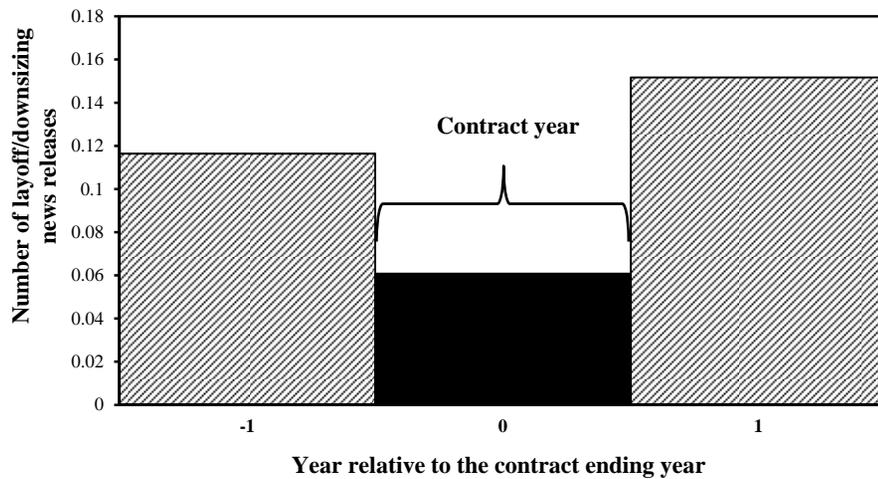
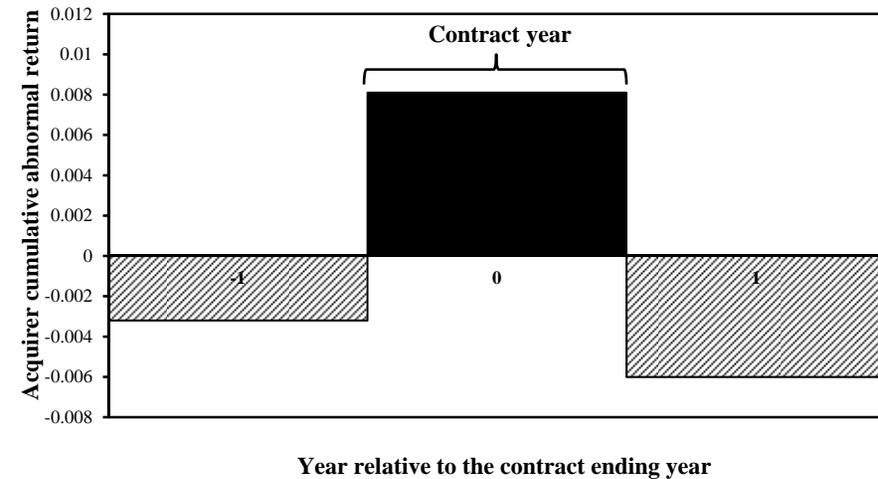


Figure 1D: Acquirer announcement returns



**Table 1**  
Summary statistics.

This table presents the mean, standard deviation, and number of observations (*N*) for the variables used in the paper.

Variable name	Mean	Standard deviation	<i>N</i>
Total assets (in million \$)	15,492.56	23,436.05	1,132
<i>Q</i>	1.840	0.853	1,132
Financial leverage	0.272	0.168	1,132
Operating performance	0.039	0.022	1,132
<b>Earnings management</b>			
Abnormal accruals	0.005	0.086	1,132
<b>Propensity to meet or just beat consensus forecasts</b>			
Meet or just beat consensus EPS forecast?	0.194	0.396	1,551
Just beat consensus EPS forecast?	0.090	0.286	1,551
<b>Negative news release</b>			
Number of negative news releases from Capital IQ	0.964	2.012	439
Number of layoff/downsizing news releases from Capital IQ	0.781	1.894	439
Number of major layoff/downsizing news releases from 8-K	0.109	0.455	439
<b>Acquisitions</b>			
Cumulative abnormal return (CAR[-1, +1])	-0.037%	0.036	264
Relative transaction value	0.073	0.154	264
Pure stock deal?	0.042	0.200	264
Related deal?	0.470	0.500	264
Public target?	0.197	0.398	264

**Table 2**  
Earnings management.

This table presents the OLS regression results for earnings management around the CEO contract year. For each sample firm, 12 quarterly observations are included in the regressions including the four quarters before, four quarters during, and four quarters after the contract year. The dependent variable is the quarterly abnormal accruals (scaled by assets) estimated from quarterly income and financial data using the modified Jones model (Jones, 1991; Dechow, Sloan, and Sweeney, 1995). *Contract year* is a dummy variable that takes the value one for the four quarters leading up to the contract ending and zero for the four quarters before and four quarters after the contract year. Control variables include firm size,  $Q$ , leverage, and operating performance. Robust standard errors clustered by firm are in parentheses. Asterisks denote statistical significance at the 1% (\*\*\*) , 5% (\*\*), or 10% (\*) level.

Independent variable	Abnormal accruals			
	(1)	(2)	(3)	(4)
Contract year?	0.015*** (0.006)	0.015*** (0.006)	0.015** (0.006)	0.014** (0.006)
Log assets		0.004 (0.003)	0.006* (0.003)	-0.020 (0.016)
$Q$		0.008* (0.004)	0.012** (0.004)	0.016 (0.011)
Financial leverage		-0.006 (0.021)	-0.010 (0.023)	-0.013 (0.043)
Operating performance		-0.210 (0.200)	-0.289 (0.199)	-0.248 (0.352)
Year fixed effects	No	No	Yes	Yes
Firm fixed effects	No	No	No	Yes
Number of observations	1,132	1,132	1,132	1,132
<i>R</i> -squared	0.007	0.011	0.023	0.150

**Table 3**

Propensity to meet or narrowly beat analyst consensus earnings estimates.

This table presents the Probit regression results (with marginal effects reported) for the propensity to meet or narrowly beat analyst consensus earnings estimates around the CEO contract year. For each sample firm, 12 quarterly observations are included in the regressions including the four quarters before, four quarters during, and four quarters after the contract year. In Columns 1 through 4, the dependent variable is a dummy variable that equals one if the quarterly EPS number either equals the analyst consensus forecast or exceeds the consensus by just one cent and zero otherwise. In Columns 5 through 8, the dependent variable is a dummy variable equal to one if the quarterly EPS number exceeds the analyst consensus forecast by just one cent and zero otherwise. *Contract year* is a dummy variable that takes the value one for the four quarters leading up to the contract ending and zero for the four quarters before and four quarters after the contract year. Control variables include firm size,  $Q$ , leverage, and operating performance. Robust standard errors clustered by firm are in parentheses. Asterisks denote statistical significance at the 1% (\*\*\*) , 5% (\*\*), or 10% (\*) level.

Independent variable	Meet or just beat consensus EPS estimates?				Just beat consensus EPS estimates?			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Contract year?	0.064** (0.025)	0.065** (0.026)	0.067*** (0.025)	0.093*** (0.034)	0.052*** (0.016)	0.051*** (0.015)	0.049*** (0.014)	0.078*** (0.021)
Log assets		0.018 (0.015)	0.020 (0.015)	0.078 (0.070)		0.005 (0.007)	0.004 (0.007)	0.011 (0.037)
$Q$		0.093*** (0.027)	0.087*** (0.028)	0.066 (0.044)		0.039*** (0.010)	0.034*** (0.011)	0.048 (0.034)
Financial leverage		0.044 (0.080)	0.022 (0.081)	-0.294 (0.229)		-0.036 (0.042)	-0.041 (0.043)	-0.293* (0.171)
Operating performance		-1.037 (0.972)	-0.868 (0.976)	2.246* (1.336)		-0.330 (0.422)	-0.219 (0.434)	-0.043 (1.126)
Year fixed effects	No	No	Yes	Yes	No	No	Yes	Yes
Firm fixed effects	No	No	No	Yes	No	No	No	Yes
Number of observations	1,551	1,551	1,526	1,226	1,551	1,551	1,515	1,008
$R$ -squared	0.006	0.028	0.045	0.159	0.012	0.029	0.041	0.105

**Table 4**

## Release of negative firm news.

This table reports the OLS regression results for negative firm news release around the CEO contract year. For each sample firm, three annual observations for the contract year and its neighboring years are included in the regressions. The dependent variable in Columns 1 through 4 is the total number of negative news articles reported in the Capital IQ database. In Columns 5 through 8, the dependent variable is the number of downsizing and layoff news articles reported in the Capital IQ database. The dependent variable in Columns 9 to 12 is the number of major layoff or downsizing news releases filed through 8-K filings. *Contract year* is a dummy variable that equals one for the one-year period leading to the contract ending date and zero for the one-year period before or after. Control variables include firm size,  $Q$ , leverage, and operating performance. Robust standard errors clustered by firm are in parentheses. Asterisks denote statistical significance at the 1% (\*\*\*) , 5% (\*\*), or 10% (\*) level.

Independent variable	Number of negative news releases reported in Capital IQ				Number of layoff/downsizing news releases reported in Capital IQ				Number of major layoff/downsizing news filed in 8-K			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Contract year?	-0.302** (0.142)	-0.300** (0.141)	-0.320** (0.146)	-0.339** (0.169)	-0.282** (0.130)	-0.280** (0.131)	-0.303** (0.133)	-0.322** (0.152)	-0.073** (0.028)	-0.075** (0.029)	-0.079** (0.031)	-0.081** (0.037)
Log assets		0.534*** (0.166)	0.490*** (0.170)	0.473* (0.265)		0.530*** (0.162)	0.513*** (0.166)	0.300 (0.245)		-0.025 (0.027)	-0.042 (0.033)	-0.042 (0.160)
$Q$		0.156 (0.183)	0.130 (0.202)	-0.284 (0.244)		0.168 (0.175)	0.169 (0.190)	-0.252 (0.235)		-0.001 (0.053)	-0.015 (0.046)	-0.100 (0.144)
Financial leverage		0.046 (0.473)	-0.121 (0.485)	-0.419 (1.101)		0.199 (0.428)	0.079 (0.447)	-0.200 (1.039)		-0.069 (0.116)	-0.139 (0.134)	-0.653 (0.658)
Operating performance		1.257 (2.029)	1.153 (2.107)	0.588 (2.018)		1.170 (1.931)	1.005 (1.970)	0.644 (1.818)		-0.414 (0.412)	-0.412 (0.386)	-0.091 (1.034)
Year fixed effects	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes
Firm fixed effects	No	No	No	Yes	No	No	No	Yes	No	No	No	Yes
Number of observations	439	439	439	439	439	439	439	439	439	439	439	439
$R$ -squared	0.005	0.110	0.185	0.597	0.005	0.120	0.185	0.628	0.006	0.013	0.056	0.376

**Table 5**

## Acquirer announcement returns.

This table reports results of OLS regressions for acquirer announcement returns around the CEO contract year. The dependent variable is the cumulative abnormal return over the three-day event window (CAR[-1, +1]) for the acquirer. *Contract year* is a dummy variable that equals one if the acquisition takes place in the one-year period leading up to the contract ending date and zero if the acquisition takes place in the one-year period before or after. Control variables include the size,  $Q$ , leverage, and operating performance performance of the acquirer, the relative size of the acquisition, and dummy variables indicating whether the transaction is financed 100 percent with stock, whether the acquirer and the target are in related industries, and whether the target is a public firm. Robust standard errors clustered by firm are in parentheses. Asterisks denote statistical significance at the 1% (\*\*\*), 5% (\*\*), or 10% (\*) level.

Independent variable	CAR [-1, +1]			
	(1)	(2)	(3)	(4)
Contract year?	0.013*** (0.004)	0.014*** (0.004)	0.013*** (0.004)	0.013** (0.006)
Log assets		-0.001 (0.002)	-0.002 (0.002)	0.005 (0.014)
$Q$		-0.004 (0.006)	-0.004 (0.007)	-0.014 (0.013)
Financial leverage		-0.001 (0.016)	-0.003 (0.017)	-0.074 (0.058)
Operating performance		0.052 (0.063)	0.045 (0.068)	0.232* (0.127)
Relative transaction value		0.009 (0.031)	0.005 (0.032)	-0.023 (0.050)
Pure stock deal?		-0.013 (0.015)	-0.012 (0.018)	-0.008 (0.029)
Related deal?		0.001 (0.005)	0.002 (0.005)	0.009 (0.008)
Public target?		-0.016** (0.007)	-0.018** (0.007)	-0.023** (0.010)
Year fixed effects	No	No	Yes	Yes
Firm fixed effects	No	No	No	Yes
Number of observations	264	264	264	264
<i>R</i> -squared	0.028	0.082	0.134	0.511

**Table 6**

Behavior of CEOs that are bound to leave office upon contract expiration.

This table reports estimates from the difference-in-differences analysis that compares firm policy changes around the contract year for CEOs who are bound to leave office upon contract expiration (“departing CEOs”) and CEOs in our main sample. Panels A, B, and C focus on earnings management (abnormal accruals), the propensity to meet or narrowly beat consensus EPS forecasts, and acquirer announcement returns, respectively. For departing CEOs, *Non-contract year* is the year before the contract year. For CEOs in our main sample, *Non-contract year* denotes the year before and the year after the contract year. Robust standard errors clustered by firm are in parentheses. Asterisks denote statistical significance at the 1% (\*\*\*), 5% (\*\*), or 10% (\*) level.

Panel A: Earnings management

	Non-contract year	Contract year	Difference
	(1)	(2)	(3) = (2) - (1)
Departing CEOs	0.009	0.000	-0.009
(N=142)	(0.009)	(0.004)	(0.009)
Main sample CEOs	0.002	0.015***	0.013***
(N=1,225)	(0.003)	(0.004)	(0.005)
Difference			Difference-in-Differences
Departing CEOs - Main sample CEOs	0.007	-0.015***	-0.022**
	(0.009)	(0.005)	(0.010)

Panel B: Propensity to meet or narrowly beat consensus EPS forecasts

	Non-contract year	Contract year	Difference
	(1)	(2)	(3) = (2) - (1)
Departing CEOs	0.195***	0.122***	-0.073
(N=164)	(0.038)	(0.034)	(0.044)
Main sample CEOs	0.169***	0.223***	0.054**
(N=1,714)	(0.016)	(0.025)	(0.024)
Difference			Difference-in-Differences
Departing CEOs - Main sample CEOs	0.026	-0.101**	-0.127**
	(0.040)	(0.042)	(0.049)

Panel C: Acquirer announcement returns

	Non-contract year	Contract year	Difference
	(1)	(2)	(3) = (2) - (1)
Departing CEOs	0.001	-0.005	-0.005
(N=24)	(0.008)	(0.003)	(0.008)
Main sample CEOs	-0.005*	0.008**	0.013***
(N=275)	(0.003)	(0.003)	(0.004)
Difference			Difference-in-Differences
Departing CEOs - Main sample CEOs	0.006	-0.013***	-0.018**
	(0.008)	(0.004)	(0.009)

**Table 7**

Behavior of a matched sample of CEOs around the pseudo contract year.

This table reports estimates from the difference-in-differences analysis that compares firm policy changes for a sample of CEOs matched to the main sample by industry, tenure, and year (“matching CEOs”) around the pseudo contract year and CEOs in our main sample around the actual contract year. Panels A, B, C, and D focus on earnings management (abnormal accruals), the propensity to meet or narrowly beat consensus EPS forecasts, negative news release, and acquirer announcement returns, respectively. *Non-contract year* denotes the year before and the year after the (actual or pseudo) contract year. Robust standard errors clustered by firm are in parentheses. Asterisks denote statistical significance at the 1% (\*\*\*), 5% (\*\*), or 10% (\*) level.

Panel A: Earnings management

	Non-contract year (1)	Contract year (2)	Difference (3) = (2) - (1)
Matching CEOs (N=1,057)	0.008** (0.003)	0.010*** (0.004)	0.002 (0.003)
Main sample CEOs (N=1,012)	0.004 (0.003)	0.020*** (0.005)	0.016*** (0.005)
Difference			Difference-in-Differences
Matching CEOs - Main sample CEOs	0.005 (0.004)	-0.010 (0.006)	-0.014** (0.006)

Panel B: Propensity to meet or narrowly beat consensus EPS forecasts

	Non-contract year (1)	Contract year (2)	Difference (3) = (2) - (1)
Matching CEOs (N=1,492)	0.228*** (0.024)	0.207*** (0.030)	-0.021 (0.022)
Main sample CEOs (N=1,412)	0.161*** (0.017)	0.215*** (0.027)	0.054** (0.027)
Difference			Difference-in-Differences
Matching CEOs - Main sample CEOs	0.067** (0.029)	-0.008 (0.040)	-0.075** (0.036)

Panel C: Negative news release

	Non-contract year (1)	Contract year (2)	Difference (3) = (2) - (1)
Matching CEOs (N=438)	0.445*** (0.086)	0.473*** (0.121)	0.027 (0.084)
Main sample CEOs (N=417)	0.842*** (0.161)	0.590*** (0.108)	-0.252* (0.130)
Difference			Difference-in-Differences
Matching CEOs - Main sample CEOs	-0.397** (0.176)	-0.117 (0.148)	0.279* (0.157)

Panel D: Acquirer announcement returns

	Non-contract year (1)	Contract year (2)	Difference (3) = (2) - (1)
Matching CEOs (N=150)	-0.000 (0.004)	-0.003 (0.005)	-0.003 (0.006)
Main sample CEOs (N=203)	-0.005* (0.003)	0.009** (0.004)	0.014*** (0.004)
Difference			Difference-in-Differences
Matching CEOs - Main sample CEOs	0.005 (0.005)	-0.012* (0.006)	-0.017** (0.008)

**Table 8**

Relation between earnings manipulation in the contract year and subsequent contract terms.

This table reports regression results for the relation between the extent of CEOs' earnings manipulation in the contract year and improvements in the contract terms of their new employment agreement after renewal. Columns 1 through 3 present estimates from Probit regressions (with marginal effects reported) in which the dependent variable is a dummy variable that equals one if the contract length is improved in the new employment agreement and zero otherwise. The contract length is considered improved if the new contract length is greater than the old one or if the new employment contract switches from a fixed-term contract to a contract with indefinite term. Columns 4 through 6 present estimates from Probit regressions (with marginal effects reported) in which the dependent variable is a dummy variable that equals one if the CEO's severance package improves in the new contract and zero otherwise. Severance is considered improved if the amount of severance pay specified in the new contract is greater than that in the old contract or if the circumstances under which the CEO can receive severance pay upon leaving post become broader. Columns 7 through 9 present estimates from OLS regressions in which the dependent variable is the difference between the sum of salary and bonus specified in the new contract versus the sum of salary and bonus the CEO earns in the last year of the current contract, scaled by the sum of salary and bonus in the last year of the current contract. *Incremental earnings management intensity in the contract year* is defined as the difference between the average abnormal accruals in the contract year and the non-contract years, scaled by the average abnormal accruals in the non-contract years. Control variables include firm size,  $Q$ , leverage, and operating performance. Robust standard errors clustered by firm are in parentheses. Asterisks denote statistical significance at the 1% (\*\*\*), 5% (\*\*), or 10% (\*) level.

Independent variable	Improved contract length?			Improved severance?			Change in salary and bonus		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Incremental earnings management intensity in the contract year	0.018** (0.007)	0.015** (0.006)	0.023*** (0.007)	0.014*** (0.006)	0.012** (0.005)	0.017** (0.008)	0.049** (0.023)	0.043* (0.024)	0.039* (0.023)
Log assets		0.051* (0.029)	0.034 (0.029)		-0.002 (0.022)	0.005 (0.026)		0.010 (0.150)	-0.033 (0.148)
$Q$		0.010 (0.058)	-0.037 (0.066)		-0.008 (0.031)	-0.008 (0.043)		-0.072 (0.115)	-0.052 (0.160)
Financial leverage		0.646*** (0.184)	0.614*** (0.220)		0.119 (0.141)	0.176 (0.180)		-0.280 (0.361)	-0.260 (0.510)
Operating performance		0.589 (0.570)	0.992* (0.601)		0.446 (0.353)	0.567 (0.425)		1.917 (1.478)	2.386 (1.641)
Year fixed effects	No	No	Yes	No	No	Yes	No	No	Yes
Number of observations	132	132	120	132	132	103	132	132	132
$R$ -squared	0.050	0.161	0.184	0.082	0.100	0.184	0.034	0.044	0.139